5

10

Volumetric Warping For Voxel Coloring On An Infinite Domain ABSTRACT

A method of generating a three-dimensional model of a scene from a plurality of photographs of the scene. The method includes voxels in an interior region and an exterior region of the scene in question and then examines the voxels to determine if they are empty or part of the objects in the scene. The interior region is divided into a plurality of interior voxels, that are preferably of the same size. The exterior region surrounds the interior space and is divided into exterior voxels having different sizes. The size of the exterior voxels increases as a function of the distance between the voxel and the interior region. The voxels that are furthest from the interior region are preferably infinite in size.